EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 63076264
PUBLICATION DATE : 06-04-88

APPLICATION DATE : 18-09-86
APPLICATION NUMBER : 61221211

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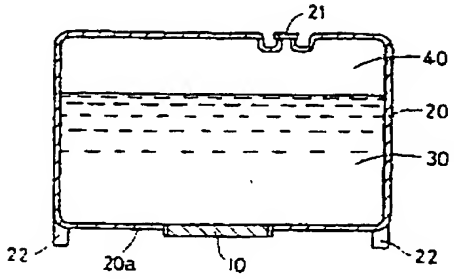
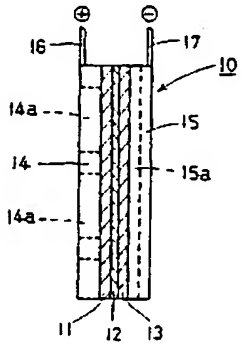
INT.CL. : H01M 8/02 H01M 8/10

TITLE : ORDINARY TEMPERATURE TYPE ACID METHANOL FUEL CELL





ABSTRACT : PURPOSE: To secure such an ordinary temperature type acid methanol fuel cell that is large in discharge capacity, by attaching a cell element to the bottom of a fuel tank or in and around this bottom part, and making a negative electrode so as not to be exposed on a fuel level even if fuel goes down.

CONSTITUTION: A cell element 10 is attached to a bottom part 20a of a fuel tank 20, while a positive electrode 11 contacts with air at the outside of this fuel tank 20, and a negative electrode 13 comes into contact with fuel 30 inside the fuel tank 20. This fuel tank 20 is one that is, for example, molded by polypropropylene, and the fuel 30 is made up of a mixture of methanol and water. A filling plug 21 for fuel combines a role as a discharge plug for carbon dioxide to be formed by the negative electrode 13, and a gas-liquid separate film is stuck to a hole part of the plug, whereby gas is passed through but liquid drops are designed so as not be discharge to the outside of the tank. If the fuel goes down due to discharge, the negative electrode 13 is made so as not to be exposed on a fuel level, so that self-consumption of methanol at the exposed art of the negative electrode and methanol by direct reaction of oxygen is thus preventable, and in consequence, any drop in the utilization factor of the methanol is prevented from occurring, thus a large capacity methanol fuel cell is securable.